WHAT IS CLAIMED IS:

1. A method of treating a disease in a subject in need thereof, the method comprising providing to the subject a therapeutically effective amount of a compound being capable of decreasing an activity and/or level of an antimicrobial peptide (AMP) and/or AMP-like molecule, thereby treating the disease in the subject in need thereof.

2. The method of claim 1, wherein said providing to the subject said compound is effected by administering said compound to the subject and/or by expressing said compound in the subject.

3. The method of claim 1, wherein said compound is selected from the group consisting of:

(a) a molecule capable of binding said AMP and/or AMP-like molecule;

(b) an enzyme capable of cleaving said AMP and/or AMP-like molecule;

(c) an siRNA molecule capable of inducing degradation of an mRNA encoding said AMP and/or AMP-like molecule;

(d) a DNAzyme capable of cleaving an mRNA or DNA encoding said AMP and/or AMP-like molecule;

(e) an antisense polynucleotide capable of hybridizing with an mRNA encoding said AMP and/or AMP-like molecule;

(f) a ribozyme capable of cleaving an mRNA encoding said AMP and/or AMP-like molecule;

(g) a non-functional analogue of at least a functional portion of said AMP and/or AMP-like molecule;

(h) a molecule capable of inhibiting activation or ligand binding of said AMP and/or AMP-like molecule; and

(i) a triplex-forming oligonucleotide capable of hybridizing with a DNA encoding said AMP and/or AMP-like molecule.

4. The method of claim 3, wherein said molecule capable of binding said AMP and/or AMP-like molecule is an antibody or an antibody fragment.

5. The method of claim 4, wherein said antibody fragment is selected from the group consisting of a single-chain Fv, an Fab, an Fab', and an F(ab')2.

6. The method of claim 2, wherein said administering said compound to the subject is effected by exposing a location of the subject to a carrier which includes said compound at a concentration selected from a range of about 50 nanograms per milliliter to about 1 milligram per milliliter.

7. The method of claim 2, wherein said administering said compound to the subject is effected by administering to the subject a plurality of doses of said compound selected from a range of 2 doses to 30 doses, wherein each inter dose interval of said plurality of doses is selected from a range of about 2.4 hours to about 30 days.

8. The method of claim 2, wherein said administering said compound to the subject is effected via a route selected from the group consisting of the topical, intranasal, transdermal, intradermal, oral, buccal, parenteral, rectal and inhalation route.

9. The method of claim 1, wherein said AMP and/or AMP-like molecule is selected from the group consisting of a defensin, a cathelicidin, a cationic peptide, a hydrophobic peptide, a human AMP and a human AMP-like molecule.

10. The method of claim 1, wherein said AMP and/or AMP-like molecule is a beta-defensin.

11. The method of claim 1, wherein said AMP and/or AMP-like molecule is selected from the group consisting of beta-defensin-1 beta-defensin-2 and LL-37.

12. The method of claim 1, wherein the disease is associated with a biological process in a cell and/or tissue, wherein the biological process is selected from the group consisting of growth, differentiation, inflammation, metastasis and angiogenesis.

13. The method of claim 12, wherein said cell and/or tissue is selected from the group consisting of an epithelial cell and/or tissue, a skin cell and/or tissue, a keratinocytic cell and/or tissue, a gastrointestinal cell and/or tissue and an endothelial cell and/or tissue.

14. The method of claim 1, wherein the subject is human.

15. The method of claim 1, wherein the disease is selected from the group consisting of a tumor, an autoimmune disease, an epithelial disease, a skin disease, a gastrointestinal disease, and an endothelial disease.

16. The method of claim 1, wherein the disease is selected from the group consisting of an epithelial tumor, an epithelial wound, a skin tumor, a skin wound, a gastrointestinal tumor, a gastrointestinal wound, an endothelial tumor, a solid tumor, a metastatic tumor, a skin autoimmune disease, and a malignant tumor.

17. The method of claim 1, wherein the disease is psoriasis or skin carcinoma.

18. An article of manufacture comprising packaging material and a pharmaceutical composition, the article of manufacture being identified for treatment of a disease being associated with a biological process in a cell and/or tissue, the biological process being selected from the group consisting of growth, differentiation, inflammation, metastasis and angiogenesis; the pharmaceutical composition comprising a pharmaceutically acceptable carrier and, as an active ingredient, a compound being capable of decreasing an activity and/or level of an antimicrobial peptide (AMP) and/or AMP-like molecule.

19. The article of manufacture of claim 18, wherein said compound is selected from the group consisting of:

(a) a molecule capable of binding said AMP and/or AMP-like molecule;

(b) an enzyme capable of cleaving said AMP and/or AMP-like molecule;

(c) an siRNA molecule capable of inducing degradation of an mRNA

encoding said AMP and/or AMP-like molecule;

(d) a DNAzyme capable of cleaving an mRNA or DNA encoding said AMP and/or AMP-like molecule;

(e) an antisense polynucleotide capable of hybridizing with an mRNA encoding said AMP and/or AMP-like molecule;

(f) a ribozyme capable of cleaving an mRNA encoding said AMP and/or AMP-like molecule;

(g) a non-functional analogue of at least a functional portion of said AMP and/or AMP-like molecule; and

(h) a molecule capable of inhibiting activation or ligand binding of said AMP and/or AMP-like molecule; and

(i) a triplex-forming oligonucleotide capable of hybridizing with a DNA encoding said AMP and/or AMP-like molecule.

20. The article of manufacture of claim 19, wherein said molecule capable of binding said AMP is an antibody or an antibody fragment.

21. The article of manufacture of claim 20, wherein said antibody fragment is selected from the group consisting of a single-chain Fv, an Fab, an Fab', and an F(ab')2.

22. The article of manufacture of claim 18, wherein said pharmaceutically acceptable carrier is selected so as to enable administration of the pharmaceutical composition via a route selected from the group consisting of the topical, intranasal, transdermal, intradermal, oral, buccal, parenteral, rectal and inhalation route.

23. The article of manufacture of claim 18, wherein said pharmaceutical composition is formulated as a solution, suspension, emulsion or gel.

24. The article of manufacture of claim 18, wherein said pharmaceutical composition is composed so as to enable exposure of a cell and/or tissue of a subject having the disease to said compound at a concentration selected from a range of about 50 nanograms per milliliter to about 1 milligram per milliliter.

25. The article of manufacture of claim 18, wherein said pharmaceutical composition is further identified for administration to a subject of a plurality of doses of said pharmaceutical composition selected from a range of 2 doses to 30 doses, wherein each inter dose interval of said plurality of doses is selected from a range of about 2.4 hours to about 30 days

26. The article of manufacture of claim 18, wherein said AMP and/or AMP-like molecule is selected from the group consisting of a defensin, a cathelicidin, a cationic peptide, a hydrophobic peptide, a human AMP and a human AMP-like molecule.

27. The article of manufacture of claim 18, wherein said AMP and/or AMP-like molecule is a beta-defensin.

28. The article of manufacture of claim 18, wherein said AMP and/or AMP-like molecule is selected from the group consisting of beta-defensin-1 beta-defensin-2 and LL-37.

29. The article of manufacture of claim 18, wherein said cell and/or tissue is selected from the group consisting of an epithelial cell and/or tissue, a skin cell and/or tissue, a keratinocytic cell and/or tissue, a gastrointestinal cell and/or tissue and an endothelial cell and/or tissue.

30. The article of manufacture of claim 18, wherein said disease is selected from the group consisting of a tumor, an autoimmune disease, an epithelial disease, a skin disease, a gastrointestinal disease, an endothelial disease and a human disease.

31. The article of manufacture of claim 18, wherein said disease is selected from the group consisting of an epithelial tumor, an epithelial wound, a skin tumor, a skin wound, a gastrointestinal tumor, a gastrointestinal wound, an endothelial tumor, a solid tumor, a metastatic tumor, a skin autoimmune disease, and a malignant tumor.

32. The article of manufacture of claim 18, wherein said disease is

psoriasis or skin carcinoma.

33. A method of regulating a biological process in a cell and/or tissue, the method comprising exposing the cell and/or tissue to a compound being capable of decreasing an activity and/or level of an antimicrobial peptide (AMP) and/or AMP-like molecule, thereby regulating the biological process in the cell and/or tissue.

34. The method of claim 33, wherein said exposing the cell and/or tissue to said compound is effected by providing said compound to a subject.

35. The method of claim 34, wherein said providing to the subject said compound is effected by administering said compound to said subject and/or by expressing said compound in said subject.

36. The method of claim 33, wherein said compound is selected from the group consisting of:

(a) a molecule capable of binding said AMP and/or AMP-like molecule;

(b) an enzyme capable of cleaving said AMP and/or AMP-like molecule;

(c) an siRNA molecule capable of inducing degradation of an mRNA encoding said AMP and/or AMP-like molecule;

(d) a DNAzyme capable of cleaving an mRNA or DNA encoding said AMP and/or AMP-like molecule;

(e) an antisense polynucleotide capable of hybridizing with an mRNA encoding said AMP and/or AMP-like molecule;

(f) a ribozyme capable of cleaving an mRNA encoding said AMP and/or AMP-like molecule;

(g) a non-functional analogue of at least a functional portion of said AMP and/or AMP-like molecule; and

(h) a molecule capable of inhibiting activation or ligand binding of said AMP and/or AMP-like molecule; and

(i) a triplex-forming oligonucleotide capable of hybridizing with a DNA encoding said AMP and/or AMP-like molecule.

37. The method of claim 36, wherein said molecule capable of binding said AMP and/or AMP-like molecule is an antibody or an antibody fragment.

38. The method of claim 37, wherein said antibody fragment is selected from the group consisting of a single-chain Fv, an Fab, an Fab', and an F(ab')2.

39. The method of claim 33, wherein said exposing the cell and/or tissue to said compound is effected by exposing the cell and/or tissue to said compound at a concentration selected from a range of about 50 nanograms per milliliter to about one milligram per milliliter.

40. The method of claim 33, wherein said AMP and/or AMP-like molecule is selected from the group consisting of a defensin, a cathelicidin, a cationic peptide, a hydrophobic peptide, a human AMP and a human AMP-like molecule.

41. The method of claim 33, wherein said AMP and/or AMP-like molecule is a beta-defensin.

42. The method of claim 33, wherein said AMP and/or AMP-like molecule is selected from the group consisting of beta-defensin-1 beta-defensin-2 and LL-37.

43. The method of claim 33, wherein the biological process is selected from the group consisting of growth, differentiation, inflammation, metastasis and angiogenesis.

44. The method of claim 33, wherein the cell and/or tissue is selected from the group consisting of an epithelial cell and/or tissue, a skin cell and/or tissue, a keratinocytic cell and/or tissue, a gastrointestinal cell and/or tissue and an endothelial cell and/or tissue.

45. The method of claim 33, wherein the cell and/or tissue is malignant and/or keratinocytic, wherein said exposing the cell and/or tissue to said compound is effected by exposing the cell and/or tissue to said compound at a concentration

selected from a range of about 0.4 microgram per milliliter to about 200 micrograms per milliliter, and whereas said AMP and/or AMP-like molecule is a cathelicidin.

46. The method of claim 33, wherein the cell and/or tissue is malignant and/or keratinocytic, wherein said exposing the cell and/or tissue to said compound is effected by exposing the cell and/or tissue to said compound at a concentration selected from a range of about 0.1 microgram per milliliter to about 50 micrograms per milliliter, and whereas said AMP and/or AMP-like molecule is a defensin.

47. The method of claim 33, wherein the cell and/or tissue is a gastrointestinal and/or epithelial cell and/or tissue, wherein said exposing the cell and/or tissue to said compound is effected by exposing the cell and/or tissue to said compound at a concentration selected from a range of about 50 nanograms per milliliter to about 10 micrograms per milliliter, and whereas said AMP and/or AMP-like molecule is a defensin.

48. The method of claim 33, wherein the cell and/or tissue is an endothelial cell and/or tissue, wherein said exposing the cell and/or tissue to said compound is effected by exposing the cell and/or tissue to said compound at a concentration selected from a range of about 50 nanograms per milliliter to about 10 micrograms per milliliter, and whereas said AMP and/or AMP-like molecule is a defensin.

49. The method of claim 33, wherein the cell and/or tissue is derived from a human.

50. A method of identifying a compound being capable of regulating a biological process in a cell and/or tissue, the method comprising:

(a) exposing the cell and/or tissue to a test compound which is:

(i) a compound being capable of decreasing an activity and/or level of an antimicrobial peptide (AMP) and/or AMP-like molecule; and/or

(ii) said AMP and/or AMP-like molecule; and

(b) evaluating a capacity of said test compound to regulate the biological process in the cell and/or tissue, thereby identifying the compound

being capable of regulating the biological process in the cell and/or tissue.

51. The method of claim 50, wherein the cell and/or tissue is a cultured cell and/or tissue.

52. The method of claim 50, wherein the cell and/or tissue is derived from a human.

53. The method of claim 50, wherein said exposing the cell and/or tissue to said test compound is effected by providing said test compound to a subject.

54. The method of claim 50, wherein said exposing the cell and/or tissue to said test compound is effected by exposing the cell and/or tissue to a cell which produces said test compound.

55. The method of claim 50, wherein said cell which produces said test compound is a B-cell hybridoma.

56. The method of claim 53, wherein said providing said test compound to said subject is effected by administering said test compound to said subject and/or by expressing said test compound in said subject.

57. The method of claim 56, wherein said administering said test compound to said subject is effected via a route selected from the group consisting of the topical, intranasal, transdermal, intradermal, oral, buccal, parenteral, rectal and inhalation route.

58. The method of claim 50, wherein said test compound is selected from the group consisting of:

(a) a molecule capable of binding said AMP and/or AMP-like molecule;

(b) an enzyme capable of cleaving said AMP and/or AMP-like molecule;

(c) an siRNA molecule capable of inducing degradation of an mRNA

encoding said AMP and/or AMP-like molecule;

(d) a DNAzyme capable of cleaving an mRNA or DNA encoding said AMP and/or AMP-like molecule;

(e) an antisense polynucleotide capable of hybridizing with an mRNA encoding said AMP and/or AMP-like molecule;

(f) a ribozyme capable of cleaving an mRNA encoding said AMP and/or AMP-like molecule;

(g) a non-functional analogue of at least a functional portion of said AMP and/or AMP-like molecule; and

(h) a molecule capable of inhibiting activation or ligand binding of said AMP and/or AMP-like molecule; and

(i) a triplex-forming oligonucleotide capable of hybridizing with a DNA encoding said AMP and/or AMP-like molecule.

59. The method of claim 58, wherein said molecule capable of binding said AMP and/or AMP-like molecule is an antibody or an antibody fragment.

60. The method of claim 59, wherein said antibody fragment is selected from the group consisting of a single-chain Fv, an Fab, an Fab', and an F(ab')2.

61. The method of claim 50, wherein said AMP and/or AMP-like molecule is selected from the group consisting of a defensin, a cathelicidin, a cationic peptide, a hydrophobic peptide, a human AMP and a human AMP-like molecule.

62. The method of claim 50, wherein said AMP and/or AMP-like molecule is a beta-defensin.

63. The method of claim 50, wherein said AMP and/or AMP-like molecule is selected from the group consisting of beta-defensin-1, beta-defensin-2 and LL-37.

64. The method of claim 50, wherein the cell and/or tissue is selected from the group consisting of an epithelial cell and/or tissue, a skin cell and/or tissue, a keratinocytic cell and/or tissue, a gastrointestinal cell and/or tissue and an endothelial

cell and/or tissue.

65. The method of claim 50, wherein the biological process is selected from the group consisting of growth, differentiation, inflammation, and angiogenesis.

66. A method of treating a disease in a subject in need thereof, the method comprising providing to the subject a therapeutically effective amount of an antimicrobial peptide (AMP) and/or AMP-like molecule, thereby treating the disease in the subject in need thereof.

67. The method of claim 66, wherein said providing to the subject said AMP and/or AMP-like molecule is effected by administering said AMP and/or AMP-like molecule to the subject and/or by expressing said AMP and/or AMP-like molecule in the subject.

68. The method of claim 67, wherein said administering said AMP and/or AMP-like molecule to the subject is effected by exposing a location of the subject to a carrier which includes said AMP and/or AMP-like molecule at a concentration selected from a range of about 2 nanograms per milliliter to about 10 micrograms per milliliter.

69. The method of claim 67, wherein said administering said AMP and/or AMP-like molecule to the subject is effected via a route selected from the group consisting of the topical, intranasal, transdermal, intradermal, oral, buccal, parenteral, rectal and inhalation route.

70. The method of claim 66, wherein said AMP and/or AMP-like molecule is selected from the group consisting of a defensin, a cathelicidin, a cationic peptide, a hydrophobic peptide, a human AMP and a human AMP-like molecule.

71. The method of claim 66, wherein said AMP and/or AMP-like molecule is a beta-defensin.

72. The method of claim 66, wherein said AMP and/or AMP-like molecule is selected from the group consisting of beta-defensin-1, beta-defensin-2 and LL-37.

73. The method of claim 66, wherein the subject is human.

74. The method of claim 66, wherein the disease is associated with a biological process in a cell and/or tissue, wherein said biological process is selected from the group consisting of growth, differentiation, inflammation and angiogenesis.

75. The method of claim 74, wherein said cell and/or tissue is selected from the group consisting of an epithelial cell and/or tissue, a skin cell and/or tissue, a keratinocytic cell and/or tissue and a tumor cell and/or tissue.

76. The method of claim 66, wherein the disease is selected from the group consisting of a tumor, an epithelial disease, a skin disease, a gastrointestinal disease and an endothelial disease.

77. The method of claim 66, wherein the disease is selected from the group consisting of an epithelial tumor, an epithelial wound, a skin tumor, a skin wound, a gastrointestinal tumor, a gastrointestinal wound and a malignant tumor.

78. An article of manufacture comprising packaging material and a pharmaceutical composition, the article of manufacture being identified for treatment of a disease being associated with a biological process in a cell and/or tissue, said biological process being selected from the group consisting of growth, differentiation, inflammation and angiogenesis; the pharmaceutical composition comprising a pharmaceutically acceptable carrier and, as an active ingredient, an antimicrobial peptide (AMP) and/or AMP-like molecule.

79. The article of manufacture of claim 78, wherein said pharmaceutically acceptable carrier is selected so as to enable administration of the pharmaceutical composition via a route selected from the group consisting of the topical, intranasal, transdermal, intradermal, oral, buccal, parenteral, rectal and inhalation route.

80. The article of manufacture of claim 78, wherein said pharmaceutical composition is formulated as a solution, suspension, emulsion or gel.

81. The article of manufacture of claim 78, wherein said pharmaceutical composition is composed so as to enable exposure of a cell and/or tissue of a subject having the disease to said compound at a concentration selected from a range of about 2 nanograms per milliliter to about 10 micrograms per milliliter.

82. The article of manufacture of claim 78, wherein said AMP and/or AMP-like molecule is selected from the group consisting of a defensin, a cathelicidin, a cationic peptide, a hydrophobic peptide, a human AMP and a human AMP-like molecule.

83. The article of manufacture of claim 78, wherein said AMP and/or AMP-like molecule is a beta-defensin.

84. The article of manufacture of claim 78, wherein said AMP and/or AMP-like molecule is selected from the group consisting of beta-defensin-1 beta-defensin-2 and LL-37.

85. The article of manufacture of claim 78, wherein said cell and/or tissue is selected from the group consisting of an epithelial cell and/or tissue, a skin cell and/or tissue, a keratinocytic cell and/or tissue and a tumor cell and/or tissue.

86. The article of manufacture of claim 78, wherein said disease is selected from the group consisting of a tumor, an epithelial disease, a skin disease, a gastrointestinal disease and an endothelial disease.

87. The article of manufacture of claim 78, wherein said disease is selected from the group consisting of an epithelial tumor, an epithelial wound, a skin tumor, a skin wound, a gastrointestinal tumor, a gastrointestinal wound and a malignant tumor.

88. A method of regulating a biological process in a cell and/or tissue, the

method comprising exposing the cell and/or tissue to an antimicrobial peptide (AMP) and/or AMP-like molecule, thereby regulating the biological process in the cell and/or tissue.

89. The method of claim 88, wherein said exposing the cell and/or tissue to said AMP and/or AMP-like molecule is effected by providing said AMP and/or AMP-like molecule to a subject.

90. The method of claim 89, wherein said providing to the subject said AMP and/or AMP-like molecule is effected by administering said AMP and/or AMP-like molecule to said subject and/or by expressing said AMP and/or AMP-like molecule in said subject.

91. The method of claim 88, wherein said exposing the cell and/or tissue to said AMP and/or AMP-like molecule is effected by exposing the cell and/or tissue to said AMP and/or AMP-like molecule at a concentration selected from a range of about 2 nanograms per milliliter to about 10 micrograms per milliliter.

92. The method of claim 88, wherein said AMP and/or AMP-like molecule is selected from the group consisting of a defensin, a cathelicidin, a cationic peptide, a hydrophobic peptide, a human AMP and a human AMP-like molecule.

93. The method of claim 88, wherein said AMP and/or AMP-like molecule is a beta-defensin.

94. The method of claim 88, wherein said AMP and/or AMP-like molecule is selected from the group consisting of beta-defensin-1, beta-defensin-2 and LL-37.

95. The method of claim 88, wherein the cell and/or tissue is selected from the group consisting of an epithelial cell and/or tissue, a skin cell and/or tissue, a keratinocytic cell and/or tissue and a tumor cell and/or tissue.

96. The method of claim 88, wherein the biological process is selected

from the group consisting of growth, differentiation, inflammation and angiogenesis.

97. The method of claim 88, wherein the cell and/or tissue is malignant, wherein said exposing the cell and/or tissue to said AMP and/or AMP-like molecule is effected by exposing the cell and/or tissue to said AMP and/or AMP-like molecule at a concentration selected from a range of about 0.1 microgram per milliliter to about 10 micrograms per milliliter, and whereas said AMP and/or AMP-like molecule is a defensin.

98. The method of claim 88, wherein the cell and/or tissue is a keratinocytic cell and/or tissue, wherein said exposing the cell and/or tissue to said AMP and/or AMP-like molecule is effected by exposing the cell and/or tissue to said AMP and/or AMP-like molecule at a concentration selected from a range of about 2 nanograms per milliliter to about 10 micrograms per milliliter, and whereas said AMP and/or antimicrobial peptide-like molecule is a defensin.

99. The method of claim 88, wherein the cell and/or tissue is derived from a human.